# Japanese Printmaking



"Driving Rain at Shōno" from Fiftythree Stations of the Tōkaidō Road, Utagawa Hiroshige, H: 24.1 x W: 36.5 cm. Courtesy of Honolulu Academy of Arts.

An artist demonstration in conjunction with the exhibition *Hokusai and Hiroshige*: *Great Japanese Prints from the James A. Michener Collection, Honolulu Academy of Arts* 

Hokusai:

September 23 - November 15, 1998

Hiroshige:

November 21 - January 17, 1999



#### HOW WERE JAPANESE WOODBLOCK PRINTS MADE?

Publication of woodblock prints was a complex process involving the collaboration of several people: the publisher, the artist, the woodblock carver, and the printer. Publishers were the key figures in the printing process from start to finish. They assessed the market, hired the designer, supervised production, and arranged for distribution.

After a publisher had decided upon the subject matter for a print or series, he commissioned an artist, such as Hokusai or Hiroshige to create the design. The artist would draw his composition in black ink on thin paper.

The artist's drawing was then sent to the woodblock carver, who pasted it face down on a block of smooth cherry wood. Several layers of the paper were peeled away leaving only a thin transparent layer of paper with the artist's outline clearly visible. The carver carefully cut away around the lines, leaving areas to be printed raised. This block containing the outlines is called the key-block.

The printer removed the residue of paper from the carved key-block and brushed the raised lines with ink. He placed a sheet of dampened paper on the block and rubbed it vigorously with a baren (a flat, round tool made of twisted cord covered with a bamboo sheath) forcing the paper into firm contact with the inked lines of the woodblock. This outline print was then given to the government censor for approval and to the artist for coloring.

Using the artist's hand-colored proof as a guide, the carver cut several different blocks that were used to apply color. Full-color prints required anywhere from 3 to 20 or more different blocks depending on the number of different colors and layers of color the artists desired. Most <code>ukiyo-e</code>, however, were created with a total of about five blocks. Because the wood used for blocks was expensive, carvers conserved by using the same block face for as many difference colors as possible, and they carved both sides of the wood. Color blocks were cut using the same steps as above, only now, the carver pasted key-block prints onto the color blocks so that all were carved to the exact same outlines. Each block also contained one raised corner and one raised edge (<code>kento</code>) that were used to register the paper as it was printed to ensure that the lines and colors would properly align on the finished print.

#### 1. Selection of the Wood

Choose the wood---one that has an even, close grain that can be cut cleanly with the tools. The most commonly used woods are cherry, pear, boxwood, willow, *lauan*, linden, silver magnolia, maple, and a plywood called "*Shina* plywood" (*Tilia* japonica, a variety of basswood). The *shina*-core plywood is preferred by some printmakers because it is more like solid planks. Plywood swells and shrinks less than solid planks, resists warping (especially the 3/8" sheets) and is available in a nearly unlimited range of sizes.

#### 2. Transferring the Design to the Block

One of the simplest ways to transfer the design is to draw on semi-transparent paper with black ink, so that the black lines will show through the back of the paper when the paper is turned over. Then place carbon paper and trace with pencil those forms to be carved in the block. Remove the tracing and carbon paper and then apply India ink, with pen or brush, to the lines traced on the block. A wash of diluted black India ink can then be brushed over the block. This wash will darken the block and create to contrast between the carved and uncarved portions of the block during carving.

### 3. Carving with the Tools

A minimum set should include one or two of each of the following five basic tools: Japanese knife (*bngi-to*), U-gouge (*kmasuki*), V-gouge (*snkaku-to*), Flat chisel (*asuki* or *nmi*), shallow U-gouge (*aamaru*). Grip the handle of the Japanese knife or tool and incline both the tool and hand to the right so that the blade of the tool enters the wood at an approximately a 60 degree angle. Maintaining this angle, pull the tool firmly toward the body. Move and reposition the block to change the direction of the cut. The U-gouge, V-gouge and Flat chisel are pushed away from the body. Hold this type of tool between the thumb and index fingers of the right hand. Place the left thumb on the tool in front of the right thumb) to act as a guide during the carving. The flat chisel is used to remove the surrounding negative areas. Use either the chisel or shallow gouge to clean up any unwanted areas from the negative backgrounds.

## 4. Registry

Registry means the exact placing of successive colors as they are printed over each other on the same sheet of paper.

- 1. To center the paper on the block by "eye." This method is recommended for the one-color print only.
- 2. To make a registry frame using two strips of wood (3" wide and 15" long) Construct a right angle with the strips and attach it to the right corner of the table that will be use for printing. The frame should be slightly less thick than the woodblock. Tack the printing paper along the right edge of the frame and slide the prepared block into the angle made by the frames; lower the paper onto the block and print.
- 3. To use Japanese kentō (registry guides) requires a woodblock larger than the size of the print paper used. To make the kentō, center and tack the drawing or design paper (on which the kentō marks have been drawn to mark the left bottom edge and right lower corner of the print paper) the block and trace the kentō onto the block. Remove the paper from the block and make a straight cut along the trace kentō lines with a Japanese knife and a flat chisel to carve a slopping depression inclined toward the cut in which to register the paper. The kentō lines should be positioned as far from the print area of the block as the width of the margin placed for the print.

#### 5. Paper (wa-shi)

In Japan, traditional handmade paper are called *washi*. *Kozo*, *mitsumata*, *gampi* are used for making *washi*. Papers for *hanga* (print) are almost invariably made by the *washi*-method. The proper kind of paper is of prime importance, and selecting one involves consideration of the color, flexibility, thickness, absorbency and presence (or absence) of sizing. This latter is important, for it gives controlled absorbency and strengthens the paper as well. Before printing with a water-soluble medium, the paper is usually dampened. One of several methods is to brush water onto each sheet and stack the paper with alternate sheets of newspaper. Another method is to stack several sheets of paper to one sheet of blotter paper. Wrap the stack in a sheet of vinyl or plastic and let it soak from 10 minutes to 24 hours, depending upon the amount of saturation that is desired. If the paper is left too long, however, it will mildew. Hand-printing an oil-base media generally requires dry paper.

#### 6. Printing

Both water-soluble and oil-based media are available for woodblock printing. All water-soluble media are applied to the block with a brush. There are variety of Japanese brushes that are excellent for this purpose, such as hanga-bake, maru-bake, and surikomibake. These brushes require special care to keep the bristles in condition. The Japanese artist uses a dried, tautly stretched sharkskin to split the end of the bristles. To apply media properly to the block, dip a hake in water and brush the surface of the wood. Then dip another hake into the prepared media and apply it to the block, being careful to avoid filling the carved-out areas. If more than one color is to be applied to the block, use another bake. Place a felt pad or similar device, under the prepared block to prevent slipping. Register the paper; smooth it from the center toward each corner. Place a second, thinner paper on top of the print to protect it. Put a light coat of fine oil on the printing surface of the baren, a round pad made of paper and bamboo materials used to apply pressure to the back of the print. Grasp the baren in one hand. Starting at one section of the print, exert downward pressure and simultaneously move the baren in a circular movement over the print. Continue until the entire print has been rubbed with the baren. At this point, it is advisable to inspect the print. Weigh down one-half of the print and carefully roll back the other half. If the print appears weak, lower the paper and apply more pressure. Inspect again. If the print is still not satisfactory, then reapply media to the block where needed. Print again, and repeat for the other half of the print. For multicolor prints, prepare the paper for a second printing. If the medium is transparent water color, dye or carbon ink, stack each printed sheet between dampened blotter sheets and wrap in a plastic sheet. While printing, dampen the margins occasionally to avoid uneven drying and subsequent shrinking of the margins.

Tomoko Murakami studied Japanese painting at Tokyo National University of Fine Arts and Music and received her MEA in printmaking from the San Francisco Art Institute.

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